

## AMENDMENTS TO THE CLAIMS

1           1.       (Currently amended) A user interface for displaying ~~information~~ database  
2 classifiers organized with multiple hierarchy levels, the user interface comprising:  
3           a root node navigation bar representing ~~the~~ a root hierarchy level of the multiple  
4 hierarchy levels; and  
5           multiple sub-node navigation bars stacked below the root node navigation bar, each sub-  
6 node navigation bar representing a sub-node from a selected level of the multiple hierarchy  
7 levels, wherein multiple sub-nodes represent database classifiers of database objects and a  
8 plurality sub-nodes in the multiple hierarchy levels represent the same database classifier  
9 representing the same database object;  
10          wherein the sub-node navigation bars display sub-nodes on the path from the root  
11 hierarchy level to the one or more sub-nodes having the lowest selected hierarchy level and  
12 wherein the user interface hides siblings of the displayed sub-nodes for the hierarchy levels  
13 between the root level and the hierarchy level of the one or more sub-nodes having the lowest  
14 selected hierarchy level.

1           2.       (Original)     The user interface of Claim 1 further comprising:  
2           information associated with a sub-node, the sub-node having the lowest selected  
3 hierarchy level.

1           3.       (Original)     The user interface of Claim 2 wherein the hierarchy levels  
2 represent non-homogeneous classifiers of the information and wherein the information  
3 associated with the sub-node having the lowest selected hierarchy level has one or more  
4 homogeneous attributes, the user interface further comprising one or more tabs associated with  
5 the one or more attributes of the information, each tab operable to select display of information  
6 having an attribute associated with the tab.

1           4.       (Original)     The user interface of Claim 1 wherein one or more of the  
2 navigation bars is operable to select display of labels for nodes from the root node to sub-nodes  
3 having a hierarchy level one level lower than the node associated with the selected navigation  
4 bar.

1           5.       (Original)     The user interface of Claim 1 implemented with one of Win32,  
2     JavaSwing or DHTML.

1           6.       (Original)     The user interface of Claim 1 presented through a browser.

1           7.       (Original)     The user interface of Claim 6 wherein the browser is populated  
2     using XML data islands.

1           8.       (Original)     The user interface of Claim 1 further comprising an activation icon  
2     associated with a navigation bar, the activation icon operable to display the hierarchy level  
3     associated with the sub-node of the navigation bar.

1           9.       (Original)     The system of Claim 8 wherein the activation icon is further  
2     operable to display sub-nodes of the activated icon.

1           10.      (Currently amended) The system of Claim 8 wherein the activation icon is  
2     further operable to hide sibling nodes of ~~teh~~ the activated icon.

1           11.      (Currently amended) A method for presenting ~~information~~ database classifiers  
2     organized by hierarchy levels, the method comprising:  
3         displaying a first hierarchy level having a first hierarchy database classifier label;  
4         displaying a second hierarchy level having multiple second hierarchy database classifier  
5     labels;  
6         activating one of the second hierarchy database classifier labels;  
7         displaying information associated with the activated database classifier label or a third  
8     hierarchy level having multiple third hierarchy database classifier labels; and  
9         hiding display of the unactivated second hierarchy database classifier labels;  
10        wherein multiple database classifier labels represent database objects and a plurality of  
11     database classifier labels in multiple hierarchy branches are the same database classifier label  
12     representing the same database object.

1           12.      (Original)     The method of Claim 11 wherein activation of the second  
2     hierarchy label displays information associated with the activated label, the information indexed  
3     according to one or more attributes, the method further comprising:

4 displaying multiple index tabs proximate to the information, each index tab associated  
5 with one or more of the attributes;  
6 activating one of the multiple index tabs; and  
7 displaying the information associated with the one or more attributes of the activated  
8 index tab.

1 13. (Original) The method of Claim 12 wherein one or more of the displayed  
2 hierarchy levels are stacked as navigation bars in order from a root level to a lowest hierarchy  
3 level.

1 14. (Original) The method of Claim 13 wherein the displayed information is  
2 stacked below the lowest hierarchy level.

1 15. (Original) The method of Claim 11 wherein activation of the second  
2 hierarchy label displays the third hierarchy level having multiple third hierarchy labels, the  
3 method further comprising:  
4 displaying an activation icon associated with the first hierarchy label, the activation icon  
5 operable to remove the multiple third hierarchy labels and to display the multiple second  
6 hierarchy labels.

1 16. (Original) The method of Claim 12 further comprising:  
2 displaying an activation icon;  
3 activating the activation icon;  
4 removing the multiple third hierarchy labels; and  
5 displaying the multiple second hierarchy labels.

1 17. (Original) The method of Claim 11 wherein the hierarchy levels are displayed  
2 as a stacked box metaphor.

1 18. (Currently amended) A computer system comprising:  
2 a database having information classified by non-homogeneous classifiers organized as a  
3 root node and multiple sub-nodes;  
4 a display operable to present a user interface;

5 a control interfaced with the database and the display, the control operable to generate a  
6 user interface for presentation on the display, the user interface having the root node and  
7 predetermined sub-nodes stacked from highest to lowest hierarchy levels, the user interface  
8 further operable to hide predetermined sub-nodes that are not relevant to the sub-node having the  
9 lowest hierarchy level, wherein multiple sub-nodes represent database classifiers of database  
10 objects and a plurality of sub-nodes in the multiple hierarchy levels are the same database  
11 classifier representing the same database object.

1 19. (Original) The computer system of Claim 18, the user interface further having  
2 predetermined information stacked below the sub-node having the lowest hierarchy level, the  
3 predetermined information associated with the sub-node having the lowest hierarchy level.

1 20. (Original) The computer system of Claim 19 wherein the information is  
2 further indexed by an attribute, the user interface further having multiple index tabs associated  
3 with the information and operable to display information having the attribute.

1 21. (Original) The computer system of Claim 20, the user interface further having  
2 a scroll bar associated with the information and operable to scroll through the information  
3 without affecting the presentation of the stacked nodes.

1 22. (Currently amended) A program product for displaying hierarchy levels of  
2 database classifiers that organize information the database classifiers with multiple nodes, the  
3 program product comprising:

4 a storage medium that stores computer readable instructions; and  
5 instructions stored on the storage medium, the instructions operable to command a  
6 computer to display selected nodes from first, second or third hierarchy levels, the instructions  
7 selecting for display the nodes of the first and second hierarchy levels display only the nodes of  
8 the first and second hierarchy levels on a traversed path to the third hierarchy level, wherein  
9 multiple nodes represent database classifiers of database objects and a plurality nodes in the  
10 hierarchy levels represent the same database classifier representing the same database object.

1 23. (Original) The program product of Claim 22 wherein the first hierarchy level  
2 comprises the root node.

1           24.     (Original)     The program product of Claim 22 wherein the second hierarchy  
2 level comprises multiple nodes, the instructions commanding the computer to display the one of  
3 the multiple nodes of the second hierarchy level on the traversed path to the third hierarchy level  
4 and to hide the sibling nodes of the displayed node.

1           25.     (Original)     The program product of Claim 22 wherein the third hierarchy level  
2 comprises information associated with a selected one of the nodes of the second hierarchy level.

1           26.     (Original)     The program product of Claim 25 further comprising multiple  
2 indices that organize the information of the third hierarchy level according to one or more  
3 attributes.

1           27.     (Original)     The program product of Claim 22 wherein the third hierarchy level  
2 comprises multiple nodes, the instructions further operable to accept a selection of one of the  
3 multiple nodes of the third hierarchy level and to hide the sibling nodes of the selected third  
4 hierarchy level node.

1           28.     (Currently amended)   An electronic display of ~~data~~ database classifiers organized  
2 with multiple hierarchy levels, the electronic display comprising:

3           a visual representation of a tree data structure having a root node and multiple descendant  
4 nodes; and

5           a visual representation of an index of data associated with a selected descendant node;  
6           wherein the visual representation of the tree data structure displays the descendant nodes  
7 on the traversed path from the root node to the selected descendant node and conceals siblings of  
8 the descendant nodes on the traversed path; and

9           wherein multiple descendant nodes represent database classifiers of database objects and  
10 a plurality descendant nodes in the multiple hierarchy levels represent the same database  
11 classifier representing the same database object.

1           29.     Canceled.

1           30.     (Original)     The electronic display of Claim 29 wherein the descendant nodes  
2 on the traversed path are selectable to display child nodes of the selected node.

1           31.     (Original)     The electronic display of Claim 29 wherein the descendant nodes  
2     on the traversed path are selectable to display sibling nodes of the selected node.

1           32.     (Original)     The electronic display of Claim 28 wherein the index comprises a  
2     visual representation of data.

1           33.     (Original)     The electronic display of Claim 32 wherein the data nodes  
2     represent non-homogeneous classifiers and the index represents a homogeneous attribute.

1           34.     (Original)     The electronic display of Claim 32 wherein the data is organized  
2     according to one or more attributes.

1           35.     (Original)     The electronic display of Claim 34 wherein the data is represented  
2     by tabs associated with the one or more attributes.

1           36.     (Original)     The electronic display of Claim 35 wherein selection of a tab  
2     displays data associated with the tab and conceals other data associated with the selected  
3     descendant node.

1           37.     (Original)     The electronic display of Claim 28 wherein the root node and  
2     descendent nodes are stacked in hierarchy level order.

1           38.     (Currently amended). A combination tree data structure and index capable of  
2     electronic visual display of ~~information~~ database classifiers organized by hierarchy levels, the  
3     combination tree data structure and index comprising:

4                 a tree data structure having one or more nodes associated with each hierarchy level; and  
5                 an index of selected information associated with a selected one of the nodes, the index  
6     having a plurality of indices, each ~~indiee~~ of the plurality of indices capable of displaying  
7     predetermined parts of the selected information,

8                 wherein the siblings of the selected node and the siblings of the ancestors of the selected  
9     node are not displayed; and

10                wherein multiple sibling nodes represent database classifiers of database objects and a  
11     plurality of sibling nodes in the hierarchy levels represent the same database classifier  
12     representing the same database object.

1           39.     (Canceled).

1           40.     (Original)     The combination tree data structure and index of Claim 38 wherein  
2 each indice is represented by a tab.

1           41.     (Original)     The combination tree data structure and index of Claim 38 wherein  
2 the hierarchy levels correspond to non-homogeneous classifiers of the information.

1           42.     (Original)     The combination tree data structure and index of Claim 38 wherein  
2 the indices correspond to one or more homogeneous attributes of the information.

1           43.     (Currently amended) A method of electronically displaying ~~information~~ database  
2 classifiers organized by hierarchy levels, the method comprising:  
3         displaying a tree structure having a plurality of nodes representing database classifiers;  
4         selecting a node; ~~and~~  
5         displaying the tree structure with only the selected node and the direct ancestors of the  
6 selected node; and  
7         displaying an index associated with the selected node, the index having a plurality of  
8 indices, each ~~indice~~ of the plurality of indices having associated information representing a  
9 database object;  
10         wherein multiple sibling nodes represent database classifiers of database objects and a  
11 plurality of sibling nodes in the hierarchy levels represent the same database classifier  
12 representing the same database object.

1           44.     (Original)     The method of Claim 43 further comprising:  
2         displaying the tree structure with only the selected node and the direct ancestors of the  
3 selected node.

1           45.     (Original)     The method of Claim 44 wherein the tree structure is displayed as  
2 a stacked box metaphor.

1           46.     (Original)     The method of Claim 45 further comprising:  
2         collapsing a node of the stacked box metaphor; and

3 displaying the tree structure with the collapsed node, the children of the collapsed node  
4 and the direct ancestors of the collapsed node.

1 47. (Original) The method of Claim 43 wherein the nodes represent non-  
2 homogeneous classifiers and the index represents homogeneous attributes.